Applied Systems Engineering, Inc.

ASE DC-Powered Bell 202 Modem

Switch Settings for Both Rack Mount (5008) and Box Mount (5006) Modem

Bold indicates factory settings

Switch	Usage	Notes	Position	Value if ON
SW1	Transmit gain	• 0 to –31 dB • Add values for all switches in the ON position	1	-1 dB
			2	-2 dB
			3	-4 dB
			4	-8 dB
JP7		JP7	removed	-16 dB
SW3	CD On Delay	• Delay in setting RS-232 "CD" signal after carrier is detected, 2 to 30 milliseconds • Add values for all switches in the ON position • At least one switch must be ON	1	2 msec
			2	4 msec
			3	**8 msec**
			4	16 msec
	soft-carrier turn-off	• Soft-carrier turnoff duration, 1 to 15 milliseconds • Add values for all switches in the ON position. • At least one switch must be ON	5	1 msec
			6	**2 msec**
			7	4 msec
			8	8 msec
SW4	RTS/CTS	• Delay between requesting RTS and granting CTS, 0 to 254 milliseconds or constant • If switch 1 is OFF, add values for all switches (2 to 8) in ON position. • If all switches are OFF, CTS is constantly enabled	1	0 msec
			2	2 msec
			3	**4 msec**
			4	8 msec
			5	**16 msec**
			6	32 msec
			7	64 msec
			8	128 msec

Jumper Settings for Box Mount (5006) Modem

Bold indicates factory settings

Jumper	Usage	Notes	Jumper	Meaning
JP1	DTR/DSR	• Uses DTR as "clear-to-send" signal, instead of CTS • Uses DSR as "request-to-send" signal instead of RTS • Normal mode (RTS/CTS) has no jumpers installed	1-2	DTR
			3-4	DSR
JP2	Receiver gain	• Sets receiver gain to –35 or –45 dB • Exactly one jumper must be installed	1-2	-45 dB
			3-4	**-35 dB**
JP3	Receiver squelch	• For half duplex mode, adds 156 millisecond delay between end of transmitted message and enabling receiver • Receiver constantly enabled if not installed	1-2	156 msec
JP4	2W/4W	• Selects 2-wire (half duplex) or 4-wire (full-duplex) operation • Exactly 2 jumpers must be installed	1-2 3-4	2-wire
			5-6 **7-8**	**4-wire**
JP5	Carrier	• Selects switched or constant carrier • Remove jumper for switched carrier	1-2	Constant
JP6	Soft-carrier operations	• Installed deactivates 900Hz transmit on incoming carrier detect or at end of transmit time (SW3) • Removed maintains 900Hz through end of transmit time (SW3) regardless of incoming carrier	**1-2**	**Installed**
JP7 adjacent to JP6	Transmit level range selection	• If installed, SW1 settings interpreted as 0 to –15 dB • If removed, SW1 settings interpreted as –16 to –31 dB	**1-2**	**Installed**
JP7 near power connector	Earth	• Jumper inserted connects (-) power input to (S) shield on terminal block	1-2	**Removed**
JP8	Power Supply	• Selects input power options, 5V or 12-160V	1-3 2-4	5V
			3-5 **4-6**	**12-160 V**
JP9	Soft-carrier enable	• Enables/disables 900Hz shut-off. Currently, the 900Hz shutoff must be selected	**1-3** **2-4**	Disables
			3-5 **4-6**	**Enables**

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			3-4	DTR
JP2	Receiver gain	• Sets receiver gain to –35 or –45 dB • Exactly one jumper must be installed	1-2	-45 dB
			3-4	**-35 dB**
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			3-4	
			5-6	**4-wire**
			7-8	
JP5	Carrier	• Selects switched or constant carrier • Remove jumper for switched carrier	1-2	Constant
JP6	900Hz turn-off	• Installed deactivates 900Hz transmit on incoming carrier detect or at end of transmit time (SW3) • Removed maintains 900Hz through end of transmit time (SW3) regardless of incoming carrier	**1-2**	**Installed**
JP7	Transmit level range selection	• If installed, SW1 settings interpreted as 0 to –15 dB • If removed, SW1 settings interpreted as –16 to –31 dB	**1-2**	**Installed**
JP9	Soft-carrier enable	• Enables/disables 900Hz shut-off. Currently, the 900Hz shutoff must be selected	**3-5**	**Enable**
			4-6	
			1-3	Disable
			2-4	